



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/614,257	07/03/2003	Pauline Shuen	112025-0524	5996
24267 7590 03/31/2008 CESARI AND MCKENNA, LLP 88 BLACK FALCON AVENUE BOSTON, MA 02210				
EXAMINER				
SOL, ANTHONY M				
ART UNIT		PAPER NUMBER		
2619				
MAIL DATE		DELIVERY MODE		
03/31/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/614,257

**Applicant(s)**

SHUEN ET AL.

**Examiner**

ANTHONY SOL

**Art Unit**

2619

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-9, 14-18 and 20 is/are allowed.
- 6) ☒ Claim(s) 10-13 and 19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S5108)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

#### **DETAILED ACTION**

- A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection.

Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Applicant's submission filed on 2/29/2008 has been entered.

- Claims 1, 14, and 20 have been amended.
- Claims 1-20 remain pending.
- Note that the Examiner was unsuccessful in contacting the Applicant on 3/24/2008, as requested in the Remarks of 2/29/2008 on page 8, including leaving a voice mail. As of the date of this Office action, a return call has not been received.

#### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 10-13 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Pub. No. US 2002/0046271 A1 ("Huang").

Regarding claim 10,

Huang shows in fig. 8, a plurality of ports of interfaces 810, 832 for connecting a device 806 to a network entity such as one connected coupled to port 840.

Huang further shows in fig. 8 at least one stack port of interface 832 for connecting the device 806 to one or more other intermediate network devices 802, 804 that cooperate to form a stack 800.

Huang discloses a port role selection state machine, Topology Discovery/**Master Election protocol 102**, configured to assign roles to the ports (para. 64, *The STP states of the stack ports are determined by the Topology Discovery protocol 102*)).

Huang discloses a port transition state machine, Topology Discovery protocol 102, configured to transition the ports among a plurality of spanning tree protocol (STP) states depending on the assigned roles (para. 64, *The STP states of the stack ports are determined by the Topology Discovery protocol 102*)).

Huang further discloses a port role selection state machine, Master Election protocol 102, is configured and arranged to assign the stack port to one of a Root Port Role/Master role or a Designated Port Role/Slave role (para. 52, *According to a first rule, if there exists an L3-capable switching node in the topology map, elect the L3-capable switching node with the smallest switch ID as the master... Otherwise, it takes a slave role*). Note that the determination of the master/slave role also determines the Root Port Role or Designated Port Role.

Huang still further discloses that the port transition state machine is configured and arranged to transition those ports that are assigned to the Root Port Role or to the

Art Unit: 2619

*Designated Port Role to a forwarding spanning tree port state (para. 61, A stack port is in the forwarding state if it is one of the end points of a tree branch link...When the topology of the stack changes, stack ports may change from the blocking state to the forwarding state).*

3. Regarding claims 11 and 12,

Huang discloses Hello Protocol module 100 that periodically sends "hello" packets through its configured stack ports to establish "adjacency" with other switches in the same stack (para. 46).

4. Regarding claim 13,

Huang discloses that the STP module determine the STP states of the non-stack ports (para. 64).

Huang discloses when a switch receives a proprietary TCN/BPDU packet from a stack port in the forwarding state, it sends back a proprietary Topology Change Acknowledgment (TCA) packet (para. 99).

5. Regarding claim 19,

Huang discloses that path costs of the stack ports are one and the path costs of the nonstack ports are ten (para. 67), which inherently causes the stack ports to be assigned to the forwarding spanning tree port state.

***Allowable Subject Matter***

6. Claims 1-9, 14-18 and 20 are allowed.

***Response to Arguments***

7. Applicant's arguments filed 2/29/2008 have been fully considered but they are not persuasive.

- Regarding claim 10, the Applicant does not directly address this claim. The only possible reference to claim 10 is on page 8 of the Remarks, wherein the Applicant states that claim 1 is representative in part of the other rejected claims.
- The Examiner respectfully disagrees. Claim 10 is directed to stack ports whereas claim 1 is mainly directed to non-stack ports. Furthermore, the Applicant provides an argument only directed to the transitioning process of a non-stack port from a discarding STP state directly to the forwarding state without intermediary STP states. However, claim 10 recites in part:

"the port role selection state machine is configured and arranged to assign the **stack port** to one of a Root Port Role or a Designated Port Role, and the port transition state machine is configured and arranged to transition those ports that are assigned to the Root Port Role or to the Designated Port Role to a forwarding spanning tree port state"  
(emphasis added).

It is clear that the limitation above is concerned with a stack port and not a non-stack port. Thus, the arguments provided in regards

to claim 1 does not apply to claim 10. Therefore, the Examiner maintains that Huang anticipates the limitations of claim 10, as well as its dependent claims 11-13 and 19.

***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Sol whose telephone number is (571) 272-5949. The examiner can normally be reached on M-F 7:30am - 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan can be reached on (571) 272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2619

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/A. S./  
Examiner, Art Unit 2619  
3/31/2008

/Wing F Chan/  
Supervisory Patent Examiner, Art Unit 2619  
3/26/08